

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

DETMOL-BIO.A (AE)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Pesticide

### 1.3. Details of the supplier of the safety data sheet

Company name: FROWEIN GmbH & Co. KG

Street: Am Reislebach 83

Place: D-72461 Albstadt

Telephone: +49 (0) 74 32-956 - 0

Telefax: +49 (0) 74 32-956 - 138

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

### 1.4. Emergency telephone

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

number: England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24  
24

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture according to 1272/2008/EC

Hazard categories:

Aerosol: Aerosol 3

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Pressurised container: May burst if heated.

May cause an allergic skin reaction.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Hazard components for labelling

Permethrin (ISO)

Signal word:

Warning

Pictograms:



#### Hazard statements

H229 Pressurised container: May burst if heated.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Special labelling of certain mixtures

1 % by mass of the contents are flammable.

### 2.3. Other hazards

Not known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

packed in two-compartment aerosol container (active ingredient and propellant are separated)

Propellant: carbon dioxide

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
124-38-9	Carbon dioxide			< 10 %
	204-696-9			
	Compressed gas; H280			
52645-53-1	Permethrin (ISO)			2,0 %
	258-067-9	613-058-00-2		
	Acute Tox. 4, Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 1000), Aquatic Chronic 1 (M-Factor = 1000); H332 H302 H317 H400 H410			
7696-12-0	Tetramethrine			0,2 %
	231-711-6			
	Aquatic Chronic 1; H410			

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

#### After inhalation

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

In the event of symptoms refer for medical treatment.

#### After contact with skin

Wash off immediately with plenty of water and soap for at least 15 minutes.

Consult a doctor if skin irritation persists.

#### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult (eye) doctor immediately.

#### After ingestion

Immediately give plenty of water (if possible charcoal slurry).

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.

Product does not burn, fire-extinguishing activities according to surrounding.

#### Unsuitable extinguishing media

Full water jet.

## 5.2. Special hazards arising from the substance or mixture

Fire may produce:

carbon monoxide and carbon dioxide

## 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

## Additional information

Cool containers at risk with water spray jet.

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective clothing.

Avoid contact with skin, eyes and clothing.

### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

### 6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Keep container tightly closed.

Avoid contact with skin, eyes and clothing.

Do not breathe vapours or spray mist.

#### Advice on protection against fire and explosion

No special protective measures against fire required.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Keep from freezing.

#### Advice on storage compatibility

No materials to be especially mentioned.

#### Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

### 7.3. Specific end use(s)

Pesticide

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
124-38-9	Carbon dioxide	5000	9150		TWA (8 h)	WEL
		15000	27400		STEL (15 min)	WEL
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

## **8.2. Exposure controls**

### **Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

### **Protective and hygiene measures**

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

Do not breath vapours or spray mist.

### **Eye/face protection**

Tightly fitting goggles (EN 166).

### **Hand protection**

Use multipurpose protective gloves (plant protection) when spreading/handling the product (EN 374).

### **Skin protection**

Long sleeved clothing (EN 368).

### **Respiratory protection**

Use protective face mask with A1-P3 (40 ASt) filter when spraying (EN 14387).

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## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (*)
Colour:	clear (*)
Odour:	Characteristic (*)

### **Changes in the physical state**

Flash point:	n.a.	
Lower explosion limits:	n.a.	
Upper explosion limits:		
Ignition temperature:	n.a.	
Density (at 20 °C):	1,0 g/cm <sup>3</sup>	(*)
Water solubility: (at 20 °C)	Miscible	

### **9.2. Other information**

(\*) All data refer to the solution

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## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No decomposition if stored and applied as directed.

### **10.2. Chemical stability**

Stable under normal conditions.

### **10.3. Possibility of hazardous reactions**

No hazardous reactions known.

### **10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

### **10.5. Incompatible materials**

No materials to be especially mentioned.

### **10.6. Hazardous decomposition products**

carbon monoxide and carbon dioxide

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## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

**Acute toxicity**

Based on available data, the classification criteria are not met.  
No toxicological data available.

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitising effects**

May cause an allergic skin reaction. (Permethrin (ISO))

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**Severe effects after repeated or prolonged exposure**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Additional information on tests**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

Tetramethrin:

LC50/Brachydanio rerio/96 h = 33 µg/l

EC50/Daphnia magna/48 h = 0,47 mg/l

EbC50/Scenedesmus subspicatus/72 h > 1,36 mg/l

Very toxic to aquatic life with long lasting effects.

Toxic to bees. (Tetramethrin)

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**12.6. Other adverse effects**

Hazardous water pollutant.

**Further information**

Do not flush into surface water or sanitary sewer system.

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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

**Waste disposal number of waste from residues/unused products**

200119 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Pesticides; hazardous waste

**Waste disposal number of contaminated packaging**

150111 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers; hazardous waste

**Contaminated packaging**

Re-using the polluted packaging materials is not allowed.

Contaminated packagings are to be treated like the product itself.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.2



Classification code: 5A  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E0  
Transport category: 3  
Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.2



Classification code: 5A  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS (Permethrin)  
**14.3. Transport hazard class(es):** 2.2  
**14.4. Packing group:** -  
Hazard label: 2.2



Marine pollutant: Yes  
Limited quantity: 1000 mL / 30 kg  
Excepted quantity: E0  
EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, non-flammable

**14.3. Transport hazard class(es):**

2.2

**14.4. Packing group:**

-

Hazard label:

2.2



Special Provisions:

A98 A145 A167 A802

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y203

Excepted quantity:

E0

IATA-packing instructions - Passenger:

203

IATA-max. quantity - Passenger:

75 kg

IATA-packing instructions - Cargo:

203

IATA-max. quantity - Cargo:

150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:

yes



**14.6. Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

The transport takes place only in approved and appropriate packaging.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

2004/42/EC (VOC):

0 %

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

2 - water contaminating

Biocide registry number:

BAuA-Reg. Nr. N-72112

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

**Relevant H and EUH statements (number and full text)**

H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*